

In re: Hargett, Jr. et al.  
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Amendments to the Claims:

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1. (Currently Amended) A protective composite sleeve material for a microwave reaction vessel, said sleeve material comprising:  
a microwave-transparent circumferentially wound cylindrical layer of contiguous yarns fixed with a ~~microwave-transparent structural medium~~ first polymer layer on one surface of said wound layer; and  
a chemically-inert polymeric inner liner on the opposite surface of said wound layer from said first structural polymer.
2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) A composite sleeve material according to Claim 3 1 and further comprising a chemically inert outer liner on said first structural polymer.
5. (Original) A composite sleeve material according to Claim 4 wherein said first structural polymer comprises a polyimide resin.
6. (Original) A composite sleeve material according to Claim 5 wherein said inner and outer liners are tetrafluoroethylene polymer.
7. (Original) A composite sleeve material according to Claim 4 and further comprising at least one additional textile layer and one additional structural polymer layer between said first structural polymer layer and said inert outer liner.
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8. (Original) A composite sleeve material according to Claim 7 wherein said additional textile layer is selected from the group consisting of wound filaments, wound yarns, woven fabric, braided fabric, nonwoven fabric, and knitted fabric.

9. (Previously Amended) A protective composite sleeve for a microwave transparent vessel, said sleeve comprising:  
a microwave transparent inner cylindrical polymeric layer;  
a first microwave transparent circumferentially wound layer of contiguous yarns adjacent to and concentric with said inner polymeric layer; and  
a microwave transparent outer polymeric layer.

10. (Original) A composite sleeve according to Claim 9 and further comprising a structural polymer layer between said wound layer and said outer polymeric layer.

11. (Original) A composite sleeve according to Claim 10 wherein said structural polymer layer comprises an engineering resin.

12. (Original) A composite sleeve according to Claim 11 wherein said engineering resin is a polyimide.

13. (Original) A composite sleeve according to Claim 10 further comprising a plurality of pairs of adjacent concentric layers of structural polymer and textiles between said inner and outer polymeric layers.

14. (Original) A composite sleeve according to Claim 13 wherein said textile layers in said pairs are selected from the group consisting of woven fabrics, braided fabrics, nonwoven fabrics, and knitted fabrics.

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15. (Original) A composite sleeve according to Claim 13 wherein said textile layers in said pairs comprise a winding selected from the group consisting of filaments and yarns.

16. (Original) A composite sleeve according to Claim 9 wherein said inner and outer polymer layers comprise a tetrafluoroethylene polymer.

[17-35 (Cancelled)]

36. (Previously Added) A protective composite sleeve material according to Claim 1 wherein said yarns are selected from the group consisting of filament and spun yarns.

37. (Previously Added) A protective composite sleeve according to Claim 9 wherein said yarns are selected from the group consisting of filament and spun yarns.

38. (New) A protective composite sleeve and vessel assembly for microwave assisted chemistry, said assembly comprising:

a sleeve formed of a microwave-transparent circumferentially wound cylindrical layer of contiguous yarns fixed with a first polymer layer on one surface of said wound layer, and a chemically-inert polymeric inner liner on the opposite surface of said wound layer from said first structural polymer; and

a microwave-transparent pressure resistant reaction cylinder surrounded by said sleeve.